

**UNITED STATES DISTRICT COURT  
SOUTHERN DISTRICT OF NEW YORK**

AMPLIFY EDUCATION, INC.,

Plaintiff/Counterclaim Defendant,

v.

GREENWOOD PUBLISHING GROUP, INC.  
d/b/a HEINEMANN,

Defendant/Counterclaim Plaintiff.

Civil Action No. 1:13-cv-02687-LTS

**AMPLIFY’S INVALIDITY CONTENTIONS**

Pursuant to Southern District of New York Local Patent Rule (“SDNYLPR”) 7 and Northern District of California Local Patent Rule (“NDCLPR”) 3-3, and as required by Paragraph 4 of the Court’s Pre-Trial Scheduling Order (D.I. 18), Plaintiff/Counterclaim Defendant Amplify Education, Inc. (“Amplify”) hereby submits the following Invalidity Contentions with respect to the asserted claims of United States Patent No. 6,299,452 (“the ’452 Patent”) identified by Defendant/Counterclaim Plaintiff Greenwood Publishing Group, Inc. d/b/a Heinemann (“Heinemann”) in its Infringement Contentions, dated December 24, 2013.

**RESERVATION OF RIGHTS**

Amplify submits these Invalidity Contentions without waiving any arguments about the sufficiency or substance of Heinemann’s Infringement Contentions, and without waiving any challenges to Heinemann’s claim constructions. Based in whole or in part on the claim interpretations that Heinemann appears to be asserting, and its alleged application of those interpretations to the accused instrumentalities, the cited prior art references and systems listed

below anticipate and/or render obvious the asserted claims of the '452 Patent, as described below and in the associated claim charts, attached hereto as Exhibits 1-33 and incorporated by reference as if fully set forth herein.

Identifying these items of prior art and other defenses in connection with these Invalidity Contentions does not serve as an admission that any alleged accused instrumentality, including any current or past version of any alleged accused instrumentality, is covered by, or infringes any of the asserted claims of the '452 Patent, particularly when the asserted claims are properly construed. Further, Amplify's Invalidity Contentions should not be construed as any admission regarding the proper construction of any asserted claim, should not be deemed to represent or limit the claim constructions that Amplify will advance in this matter, and should not be deemed to relate to the non-infringement positions Amplify may advance in this matter.

Amplify's Invalidity Contentions reflect Amplify's current knowledge, thinking and contentions as of this early date in the present action. Amplify reserves the right, to the extent permitted by the Court and the applicable statutes and rules, to modify and supplement, without prejudice, these Invalidity Contentions for good cause or for other appropriate reason, including but not limited to, after the Court issues its claim construction ruling pursuant to the Court's local patent rules and/or if Heinemann is allowed to modify, amend or supplement its Infringement Contentions.

Amplify reserves the right to raise additional prior art and invalidity defenses not included in these Invalidity Contentions based on additional discovery or other issues raised by Heinemann in this action or in any related action. Amplify further reserves the right to amend these Invalidity Contentions, for example, should Heinemann provide any information that it failed to provide in its Local Patent Rule disclosures.

Further, because discovery has only recently begun, and because Amplify has not yet completed its search for and analysis of relevant prior art, Amplify reserves the right to revise, amend, and/or supplement the information provided herein, including identifying and relying on additional references should Amplify's further search and analysis yield additional information or references, consistent with the Local Patent Rules and the Federal Rules of Civil Procedure. Amplify expressly reserves the right to rely on witness testimony about the prior art references to supplement these contentions, where appropriate. Moreover, Amplify reserves the right to revise its ultimate contentions concerning the invalidity of the asserted claims, which may change depending upon the Court's construction of the asserted claims, any findings as to the priority date of the asserted claims, and/or positions that Heinemann or its fact or expert witness(es) may take concerning claim construction, infringement, and/or invalidity issues.

Amplify also relies on and incorporates by reference, as if originally set forth herein, all invalidity positions, and all associated prior art and claim charts, asserted against Heinemann by any present or former defendants in any lawsuits or other proceedings (and all legal entities that are or were predecessors, successors, or otherwise related to Heinemann), or by potential or actual licensees to the '452 Patent. Moreover, Amplify reserves the right to supplement these Invalidity Contentions based on prior art currently known to Heinemann, such as documents responsive to Amplify's discovery requests and prior art identified or provided to Heinemann by third parties.

The accompanying claim charts (attached hereto as Exhibits 1-33) list specific examples of where prior art references disclose, either expressly or inherently, each limitation of the asserted claims and/or examples of disclosures in view of which a person of ordinary skill in the art at the time of the alleged invention would have considered each limitation, and therefore the

claim as a whole, obvious. Amplify's disclosure that a particular reference renders an element of an asserted claim obvious should not be construed to suggest that the reference does not disclose that element, either expressly or inherently. Amplify's disclosure of suggested obviousness combinations should not be construed to suggest that the underlying reference does not anticipate or render obvious the asserted claim on its own. The references may contain additional support upon which Amplify may rely. The citations included in each chart are illustrative, not exhaustive. For any given quotation or excerpt, for example, Amplify reserves the right to introduce other text and images (including but not limited to surrounding, related, or explanatory text, images, or un-cited portions of the prior art references) from the same or other documents that may help to provide context to the quotation or excerpt. Furthermore, where Amplify cites to a particular figure in a reference, the citation should be understood to encompass the caption and description of the figure and any text relating to the figure. Similarly, where Amplify cites to particular text referring to a figure, the citation should be understood to include the corresponding figure as well. Amplify may also rely on other documents and information, including cited references and prosecution histories for the '452 Patent, and witness testimony, including expert testimony, to explain, amplify, illustrate, demonstrate, provide context or aid in understanding the cited portions of the references.

## **I. INVALIDITY CONTENTIONS [NDCLPR 3-3]**

### **A. Identity of Each Item of Prior Art That Allegedly Anticipates Each Asserted Claim or Renders It Obvious [NDCLPR 3-3(a)]**

Pursuant to NDCLPR 3-3(a), and subject to Amplify's reservation of rights above, each asserted claim of the '452 Patent is anticipated and/or rendered obvious by the prior art listed below.<sup>1</sup>

---

<sup>1</sup> Under the recently enacted America Invents Act ("AIA"), invalidating prior art is defined in 35 U.S.C. § 102. However, AIA Section 102 was not effective until March 17, 2013. The '452

Prior Art Patents and Patent Applications

The following patents and patent applications are prior art under 35 U.S.C. §§ 102(a), (b), (e), and/or 35 U.S.C. § 103, as identified in the accompanying Exhibits 1-33.

	<b>Patent No.</b>	<b>Country of Origin</b>	<b>Date of Issue</b>	<b>Exhibit No.</b>
1.	U.S. Pat. No. 5,267,865	United States	Dec. 07, 1993	01
2.	U.S. Pat. No. 6,289,310	United States	Sep. 11, 2001	02
3.	U.S. Pat. No. 5,810,605	United States	Sep. 28, 1998	03
4.	U.S. Pat. No. 5,692,906	United States	Dec. 02, 1997	04
5.	U.S. Pat. No. 6,146,148	United States	Nov. 14, 2000	05
6.	U.S. Pat. No. 6,055,498	United States	Apr. 25, 2000	10
7.	U.S. Pat. No. 6,669,479	United States	Dec. 30, 2003	16
8.	U.S. Pat. No. 5,303,327	United States	Apr. 12, 1994	19
9.	U.S. Pat. No. 5,855,483	United States	Jan. 05, 1999	20
10.	U.S. Pat. No. 5,868,683	United States	Feb. 09, 1999	21
11.	U.S. Pat. No. 6,045,515	United States	Apr. 04, 2000	22
12.	U.S. Pat. No. 6,186,794	United States	Feb. 13, 2001	23
13.	U.S. Pat. No. 6,305,942	United States	Oct. 23, 2001	24
14.	U.S. Pat. No. 6,364,666	United States	Apr. 2, 2002	32
15.	U.S. Pat. No. 5,010,495	United States	Apr. 23, 1991	33

Prior Art Publications

The following publications are prior art under 35 U.S.C. §§ 102(a), (b) and/or 35 U.S.C. § 103, as identified in the accompanying Exhibits 1-33.

	<b>Publication Title</b>	<b>Publication Date</b>	<b>Author/Publisher</b>	<b>Exhibit No.</b>
1.	An Evaluation of Computer-Assisted Instruction on Phonological Awareness with Below Average Readers	1995	Theodore Allen Barker, et. al.	11
2.	Computers In Language Testing: Present Research and Some Future Directions	July 1997	James Dean Brown	12
3.	Effects of Computer-Assisted Training of Blending Skills in Kindergarteners	November 19, 2009	Pieter Reitsma/Ralph Wesseling/Routledge	13
4.	Implementing a Long Term Computerized Remedial Reading Program with	1989	Barbara Wise, et. al.	14

---

Patent predates March 17, 2013, and therefore pre-AIA Section 102 (including subsections 102(a), (b), (e), and (g)) applies to the prior art identified in these Invalidity Contentions and the attached Exhibits.

	Synthetic Speech			
5.	Multimedia Computer Technology and Performance-Based Language Testing: A Demonstration of the Computerized Oral Proficiency Instrument (COPI)	June 1999	Valarie A. Malabonga, Dorry M. Kenyon	15
6.	Computerized Adaptive Language Testing: Moving Beyond Computer-Assisted Testing	March 1985	Jerry W. Larson, Harold S. Madsen	17
7.	Increasing Reading and Communication Skills in Children with Autism Through an Interactive Multimedia Computer Program	1995	Mikael Heimann, et. al./ Plenum Publishing Corp.	18
8.	Retaining Your Brain	July 5, 1999	John Greenwald	26
9.	Report on the Effectiveness of Technology in Schools	1994	Jay Sivin-Kachala, Ellen R. Bialo/Software Publishers Association	27
10.	Visual Feedback for a Student Learning Language Pronunciation	September 1997	Kenneth H. Fritzsche	28
11.	Computer-Assisted Literacy Instruction in Phonics	April 1980	Robert A. Wisher	29
12.	Phonemic Awareness: A Review of Literature	March 12, 1998	Shelia Wilson	31
13.	Phonemic Awareness in Young Children	September 1997	Marilyn Jager Adams, et. al./Paul H. Brookes Publishing Co.	32

### Prior Art Systems

The following systems are prior art under at least 35 U.S.C. §§ 102(a), (b), (g) and/or 35 U.S.C. § 103. Although Amplify's investigation continues, information available to date indicates that each system was (1) known, published, or used in this country before the alleged invention of the '452 Patent, (2) was published, in public use, and/or on sale in this country more than one year before the filing date of the '452 Patent, and/or (3) was invented by another who did not abandon, suppress, or conceal, before the alleged invention of the '452 Patent.

	<b>System</b>	<b>Date of Offer / Use</b>	<b>Person / Entity</b>	<b>Exhibit No.</b>
1.	Earobics	1997 (including any other versions that existed prior to July 9, 1999)	Cognitive Concepts, Inc.	06
2.	Initial Reading (Successmaker)	1994 (including any other versions that existed prior to July 9, 1999)	Pearson Education, Inc.	07
3.	Kaplan	1997 (including any other versions that existed prior to July 9, 1999)	Kaplan, Inc.	08
4.	‘Tronic Phonics	1997 (including any other versions that existed prior to July 9, 1999)	The Mc-Graw Hill Compaines, Inc.	09
5.	Waterford Early Learning	1998 (including any other versions that existed prior to July 9, 1999)	Pearson Education, Inc.	25

Information concerning these systems, including information concerning the entities who knew of and/or used these systems, or who were involved in any sales or offers to sell these systems, can be found in the exemplary printed publications identified below.

	<b>System</b>	<b>Reference</b>	<b>Publication Date</b>	<b>Author/ Publisher</b>	<b>Exhibit No.</b>
1.	Earobics	Listen and Learn? A Software Review of Earobics. Language, Speech, and Hearing Services in Schools	January 1999	S. Diehl	06
2.	Earobics	Frequently Asked Questions about the Earobics® Product Line	May 19, 1998	Cognitive Concepts, Inc.	06
3.	Earobics	The Research Basics of Earobics	1999	Cognitive Concepts, Inc.	06
4.	Initial Reading (Success Maker)	Teacher’s Handbook for Initial Reading	1988	Computer Curriculum Corporation	07
5.	Initial Reading (Success Maker)	An Overview of The CCC Instructional System on the IBM PS/2	1991	Computer Curriculum Corporation	07
6.	Initial Reading (Success	Instructional Management Handbook	1993	Computer Curriculum	07

	Maker)			Corporation	
7.	Initial Reading (Success Maker)	Match Concepts and Skills, Teacher's Handbook	1993	Computer Curriculum Corporation	07
8.	Initial Reading (Success Maker)	Management System Guide	1998	Computer Curriculum Corporation	07
9.	Initial Reading (Success Maker)	Teacher's Handbook for English as a Second Language	1984	Computer Curriculum Corporation	07
10.	Kaplan	Kaplan RoadTrip for the SAT (1997)	1997	SuperKids Educational Software Review	08
11.	'Tronic Phonics	Fall 1998: Software Reviews	1998	TCNJ	09
12.	Waterford Early Learning	The Technology-Reading Connection. Educational Leadership	1999	Robert Alfaro	25
13.	Waterford Early Learning	Waterford Early Reading Program	1999	Education Commission of the States	25

Each exemplary printed publication describing or relating to a prior art system should be understood to discuss the system's capabilities generally and also to discuss specific implementation examples of specific installations of the particular system. To the extent the exemplary references describe various implementations of the same underlying system, that underlying system is a single reference under 35 U.S.C. §§ 102(a) and/or 102(b). The exemplary references are evidence of the capabilities of the prior system, and each chart provided for a prior art system should be understood to incorporate by reference all printed publications describing or relating to that prior art system and all charts provided for those printed publications. In addition, each of the references itself also qualifies as prior art on separate grounds as a publication under sections 102(a) and/or 102(b). Even if the exemplary references are not treated as a single prior art reference, at the very least it would have been obvious to combine the features described in those references inasmuch as the individual references discuss the same system. Additionally, discovery has only recently begun, and Amplify reserves the right to rely on the testimony of



witnesses knowledgeable about these systems, as well as documents describing these systems that are currently in the possession of third parties.

In addition to the references and systems listed above, and as Amplify's investigation continues, Amplify identifies the following additional references and systems that, upon Amplify's information and belief, further demonstrate the scope and content of the prior art and/or render the asserted claims obvious pursuant to 35 U.S.C. § 103.

	<b>Publication/System</b>	<b>Date of Issue/ Publication/Sale/Use</b>	<b>Author/Publisher/Entity or Country of Origin</b>
1.	NovaNET	Upon information and belief, 1989	Upon information and belief, University of Illinois
2.	PLATO	Upon information and belief, 1974	Upon information and belief, Control Data Corporation
3.	Cognitive Tutor Algebra I / Pump Algebra Tutor	Upon information and belief, 1998	Upon information and belief, Carnegie Learning
4.	Getting Ready to Read and Add / M-ss-ng L-nks / Pockets - The Parts of Speech Game / Prefix Pack	Upon information and belief, 1983	Upon information and belief, Sunburst Communications Inc.
5.	Breakthrough to Literacy	Upon information and belief, 1992	Upon information and belief, the Wright Group
6.	KazMania: Chaos in Kazmania / KazMania: Trail of Gems	Upon information and belief, 1997	Upon information and belief, Lightspan Technologies
7.	Apex Learning	Upon information and belief, 1997	Upon information and belief, Apex Learning
8.	Larson's Middle School Math, Grades 6, 7, and 8	Upon information and belief, 1998	Upon information and belief, Larson Learning
9.	DISTAR (Direct Instruction System for Teaching Arithmetic and Reading)	Upon information and belief, 1956	Upon information and belief, Science Research Associates Inc.
10.	Inside the S.A.T.	Upon information and belief, 1995	Upon information and belief, Princeton Review
11.	Integrated Learning System	Upon information and belief, 1998	Upon information and belief, Jostens Learning Corporation
12.	An Architecture for a Literacy Teaching ITS	1999	Carvalho, et. al.
13.	Blending and Deletion Skills in Non-Reading Children	1995	Griffiths, Lisa Mary
14.	Reading Level Determination and Evaluation	March 1981	Noonan, L.
15.	Speech Modifications	September 1998	Nagarajan, et. al

	Algorithms Used for Training Language Learning-Impaired Children		
16.	Preeschoolers Learn at Home	October 1984	Penny Smith
17.	Reading Programs That Work: A Review of Programs for Pre-kindergarten to 4th grade	January 1999	John Schacter
18.	A Program for the Development of Reading Readiness Skills for Kindergarten Students Using a Cross-Age Reading	November 8, 1996	Trimble, W. Jean
19.	Embedding Cooperative Learning into the Design of Integrated Learning Systems: Rationale and Guidelines	1998	Thomas A. Brush
20.	Computer-Based Integrated Learning Systems	Jan. 1, 1993	Gerald D. Bailey Educational Technology Publications, Inc.
21.	Phonemic Awareness Training: Application of Principles of Direct Instruction	1995	Janet E. Spector
22.	U.S. Patent No. 6,019,372	February 1, 2000	United States

Amplify hereby incorporates by reference in their entirety each and every prior art patent, publication, non-patent literature, and prior art offered for sale, publicly used or known, cited during the prosecution of the '452 Patent, or of any related patent, including the statements made therein by the applicant and the examiner. Discovery is ongoing and Amplify reserves its right to supplement and/or amend this list, consistent with this Court's rules, as it receives additional information either through its own investigations or from Heinemann or third parties.

**B. Whether Each Item of Prior Art Anticipates Each Asserted Claim or Renders It Obvious [NDCLPR 3-3(b)]**

Based upon presently known information, the accompanying Exhibits 1-33 identify for each item of prior art whether it anticipates each asserted claim and/or renders each asserted claim obvious. Any of the prior art references or systems in Exhibits 1-33 may be combined with any other prior art reference or system in Exhibits 1-33 to render obvious, and therefore invalidate, the asserted claims of the '452 Patent.

To the extent any claim is not anticipated by the prior art, it is rendered obvious under 35 U.S.C. § 103. The prior art references or systems in Exhibits 1-33 may disclose limitations of

the asserted claims of the '452 Patent either explicitly, inherently, and/or because one of ordinary skill in the art could have taken his or her knowledge of the art alone or in combination with the teachings of these references and have been in possession of the alleged invention and be enabled to make and use the alleged invention.

Exemplary combinations of the prior art references and systems are set forth in Exhibits 1-33. The suggested obviousness combinations are in the alternative of Amplify's anticipation and single reference obviousness contentions and are not to be construed as a suggestion or admission that any of the prior art references or systems included in the combinations is not invalidating prior art on its own, and Amplify reserves the right to argue that a particular claim element is disclosed expressly and/or inherently in a given reference or system. The obviousness combinations are also merely exemplary combinations of the prior art references and systems, and are not intended to be exhaustive.

A person of skill in the art would have been motivated to combine each of the prior art references and systems identified in Exhibits 1-33. As the United States Supreme Court held in *KSR Int'l Co. v. Teleflex Inc.*, “[t]he combination of familiar elements according to known methods is likely to be obvious when it does no more than yield predictable results.” 127 S. Ct. 1727, 1731 (2007). The Supreme Court further held that, “[w]hen a work is available in one field of endeavor, design incentives and other market forces can prompt variations of it, either in the same field or a different one. If a person of ordinary skill can implement a predictable variation, §103 likely bars its patentability. For the same reason, if a technique has been used to improve one device, and a person of ordinary skill in the art would recognize that it would improve similar devices in the same way, using the technique is obvious unless its actual application is beyond his or her skill.” *Id.* at 1740. In addition, “[w]hen there is a design need or market pressure to solve a problem and there are a finite number of identified, predictable solutions, a person of ordinary skill in the art has good reason to pursue the known options within his or her technical grasp. If this leads to the anticipated success, it is likely the product not of innovation but of ordinary skill and common sense.” *Id.* at 1732.

The Supreme Court determined that the rigid application of the teaching-suggestion-motivation to combine test is inconsistent with the flexible approach to obviousness outlined in earlier Supreme Court cases. *Id.* at 1739 (“We begin by rejecting the rigid approach of the Court of Appeals. Throughout this Court’s engagement with the question of obviousness, our cases have set forth an expansive and flexible approach inconsistent with the way the Court of Appeals applied its TSM test here.”). Nevertheless, motivation to modify or combine any two or more of the references identified in Exhibits 1-33 comes from the fact that all of the references teach systems and methods for educational techniques and learning devices, and /or systems and methods for improving a student’s ability to comprehend and learn, and one would be motivated by considerations of efficiency, effectiveness, convenience, cost-savings, and accessibility, to combine the various teachings. Motivation to modify or combine the references in the manner claimed can be found in the explicit and/or implicit teachings and the prior art as a whole, the general knowledge of those skilled in the art, including knowledge of trends in the field and knowledge that the art is of special interest or importance in the field, and from the fact that the references and systems are in the same field of endeavor and/or seek to solve a common problem. Thus, it would have been obvious to one of ordinary skill in the art to modify or combine any of the disclosed references to arrive at the claimed invention.

To the extent that Heinemann contends that any of the anticipatory prior art fails to disclose explicitly, implicitly, or inherently one or more limitations of the asserted claims, Amplify reserves the right to argue that any difference between the reference and the corresponding patent claims would have been obvious to one of ordinary skill in the art even if it has not specifically denoted that the reference is to be combined with the knowledge of a person of ordinary skill in the art. Further, Amplify reserves the right to identify other prior art references that, when combined with anticipatory prior art, would render the claims obvious.

**C. Chart Identifying Where Specifically In Each Alleged Item of Prior Art Each Limitation of Each Asserted Claim is Found, Including 112(6) [NDCLPR 3-3(c)]**

Charts identifying specifically where each item of asserted prior art discloses each limitation of each asserted claim of the '452 Patent (either directly or inherently, or in combination with other references) are included in the attached Exhibits 1-33. The citations found in the charts are merely exemplary and are not meant to be limiting in any way.

To the extent any cited prior art reference is deemed not to anticipate a claim as noted in the attached charts for failing to teach or suggest one or more limitations of that claim, the claim would nonetheless have been inherent and/or obvious to one of ordinary skill in the art at the time of the alleged invention(s), either alone or by the combination of the cited prior art references with any of the other listed references.

It should be understood that citations within each exhibit are exemplary, not exhaustive, and should not be construed as the sole evidentiary support in the reference.

At this time, Amplify contends that the following limitations may be governed by 35 U.S.C. § 112(6) (now § 112(f)):

- “means for displaying at least one of a graphical image and audio associated with each test located on the server” (Claim 1)
- “means for receiving a user response to one of the graphical images and audio presented by each test” (Claim 1)
- “means for communicating the responses for each test back to the server computer so that a skill level for each test and each reading or pre-reading skill being tested by the test is determined” (Claim 1)
- “means for speaking [the/a] verbal response into the speech recognition device for receiving a verbal response from the user” (Claims 6, 40, 57)
- “means for providing at least two stimuli to the user” (Claims 7, 41, 58)
- “means for receiving user input in response to the at least two stimuli to determine the users ability to recognize rhyming words” (Claims 7, 41, 58)
- “means for generating at least one stimulus having at least an initial phoneme” (Claims 8, 42, 59)

- “means for receiving a response to the stimulus that indicates an ability of the test taker to recognize the initial phoneme of the stimulus” (Claims 8, 42, 59)
- “means for generating at least one stimulus having at least an ending phoneme” (Claims 9, 43, 60)
- “means for receiving a response to the stimulus that indicates an ability of the test taker to recognize the ending phoneme of the stimulus” (Claims 9, 43, 60)
- “means for generating a stimulus” (Claims 10, 44, 61)
- “means for receiving a response from the user identifying a sound unit that rhymes with the stimulus” (Claims 10, 44, 61)
- “means for generating at least two sound stimuli” (Claims 11, 45, 62)
- “means for receiving a user response to the at least two sound stimuli, the response indicating an ability to blend the at least two sound stimuli into a larger sound unit” (Claims 11, 45, 62)
- “means for generating at least one stimulus” (Claims 12, 46, 63)
- “means for receiving a response to the stimulus comprising means for segmenting the stimulus into smaller units in order to test the ability to segment the stimulus into smaller units” (Claims 12, 46, 63)
- “means for segmenting the stimulus into smaller units in order to test the ability to segment the stimulus into smaller units” (Claims 12, 29, 46, 63)
- “means for generating a sound stimulus having one or more sound units” (Claims 13, 47, 64)
- “means, in response to the sound stimulus, for manipulating the sound units of the sound stimulus to test the ability to manipulate sound units” (Claims 13, 47, 64)
- “means for generating at least one sound stimulus” (Claims 14, 48, 65)
- “means, in response to the at least one sound stimulus, for receiving a user response indicating the recalling of the at least one sound stimulus” (Claims 14, 48, 65)
- “means for generating at least one visual stimulus” (Claims 15, 49, 66)
- “and means, in response to the display of the visual stimulus, for speaking the name of or the sound associated with the visual stimulus using the speech recognition device” (Claims 15, 49, 66)
- “means for displaying a visual stimulus to the user” (Claims 16, 50, 67)

- “means, in response to the visual stimulus, for receiving a response from the user to determine the ability to read the visual stimulus” (Claims 16, 50, 67)
- “means for generating a plurality of visual stimuli” (Claims 17, 51, 68)
- “means for receiving a user's response to the visual stimuli within a predetermined time interval to determine the user's ability to read and understand the visual stimuli” (Claims 17, 51, 68)
- “means for receiving responses from the individual to the one or more tests” (Claim 35)
- “means for downloading one or more tests from a server, each test determining if the individual has a deficiency in a reading or pre-reading skill” (Claim 52)
- “means for generating a response to the tests, the response being communicated to the server computer” (Claim 52)
- “means for receiving a score for each test from the server computer” (Claim 52)
- “means for receiving a recommendation, based on the scores of the one or more tests, for using one or more training modes for improving a reading or pre-reading skill of the individual as indicated by the score of the tests to avoid or remediated language-based learning disabilities” (Claim 52)
- “tests for determining deficiencies in one or more reading and pre-reading skills” (Claims 1, 35)
- “scorer for determining a score for each test” (Claims 1, 35)
- “recommender for recommending, based on the scores of the one or more tests, one or more training modules for improving a reading or pre-reading skill of the individual as indicated by the score of the tests” (Claims 1, 35)
- “training modules for improving a reading or pre-reading skill of the individual as indicated by the score of the tests” (Claims 1, 18, 35)
- “training modes for improving a reading or pre-reading skill of the individual as indicated by the score of the tests to avoid or remediated language-based learning disabilities” (Claim 52)
- “speech recognition device for receiving and interpreting a verbal response from the user to the one or more tests” (Claims 4, 21, 55)
- “test for recognizing the beginning sound of a stimulus” (Claims 8, 25, 42, 59)
- “test for recognizing the ending sound of a stimulus” (Claims 9, 26, 43, 60)

- “rhyme recognition test for testing the ability to recognize rhymes” (Claims 5, 22, 39, 56)
- “a rhyme generation test for testing the ability to generate rhymes” (Claims 5, 22, 39, 56)
- “a beginning and ending sound recognizer for testing the ability to recognize the beginning and ending sounds of a word” (Claims 5, 22, 39, 56)
- “a word decoder test for testing the ability to read by sounding out a written word” (Claims 5, 22, 39, 56)
- “a sound blender test for testing the ability to blend sound units together to form words” (Claims 5, 22, 39, 56)
- “a sound segmenting test for testing the ability to segment a sound unit into smaller sound units” (Claims 5, 22, 39, 56)
- “a sound manipulator test for testing the ability to manipulate sound units to form a new unit” (Claims 5, 22, 39, 56)
- “a sequential verbal recall test for testing the ability to recall a sequence of spoken items” (Claims 5, 22, 39, 56)
- “a rapid naming test for testing the ability to rapidly name one or more items” (Claims 5, 22, 39, 56)
- “a letter naming and symbol/sound association test for testing the ability to name letters and identify the association between a symbol and an associated sound” (Claims 5, 22, 39, 56)
- “a fluent reader test for testing the ability to read fluently” (Claims 5, 22, 39, 56)

The above identified claims are invalid under 35 U.S.C. § 112(6) (now § 112(f)) for failure to describe structure or an algorithm for accomplishing the functions specified in the limitations listed above and are further invalid under 35 U.S.C. § 112(1) and/or § 112(2) (now § 112(a) and § 112(b)) as indefinite, lacking written description, and/or lacking enablement. Amplify reserves the right to supplement this list. An identification of the structure(s), act(s) or material(s) in each item of prior art that performs the claimed function can be found in the attached Exhibits 1-33.



**D. Grounds of Invalidity Based On 35 U.S.C. 101, Indefiniteness Under 35 U.S.C. 112(2) or Enablement or Written Description Under 35 U.S.C. 112(1) [NDCLPR 3-3(d)]**

At this time, Amplify contends that the following limitations of the '452 Patent may be governed by 35 U.S.C. § 112(1) and/or § 112(2) (now § 112(a) and § 112(b)) as indefinite, lacking written description, and/or lacking enablement.

- The limitation “pre-reading skill(s)” (claims 1, 18, 35, and 52) lacks written description and/or enablement, and is indefinite for failure to distinctly claim the subject matter which the inventor regards as the invention, and thus renders claims 1, 18, 35, and 52, and their asserted dependent claims invalid under 35 U.S.C. § 112. It is unclear and ambiguous, and the specification fails to disclose, what is meant by “pre-reading skills.”
- The limitation “may establish a communications session” (claim 1) is indefinite for failure to distinctly claim the subject matter which the inventor regards as the invention, and thus renders claim 1 and its asserted dependent claims invalid under 35 U.S.C. § 112. It is unclear and ambiguous whether “establishing a communication session” is required by the claim.
- The limitation “displaying at least one of a graphical image and audio” (claim 1) is indefinite for failure to distinctly claim the subject matter which the inventor regards as the invention, and thus renders claim 1 and its asserted dependent claims invalid under 35 U.S.C. § 112. It is unclear and ambiguous how “audio” is “displayed.”
- The limitation “the server” (claims 1 and 2) is indefinite as having an insufficient antecedent basis, and thus renders claims 1 and 2 and their asserted dependent claims invalid under 35 U.S.C. § 112.
- The limitation “user response” (claims 1, 11, 14, 28, 31, 45, 48, 62, 65) is indefinite as having an insufficient antecedent basis and indefinite for failure to distinctly claim the subject matter which the inventor regards as the invention, and thus renders claim 1 and its asserted dependent claims invalid under 35 U.S.C. § 112. It is unclear and ambiguous whether the “user” is distinct from the recited “individual.”
- The limitation “the responses for each test” (claim 1) is indefinite as having an insufficient antecedent basis, and thus renders claim 1 and its asserted dependent claims invalid under 35 U.S.C. § 112.
- The limitation “skill level” (claim 1) lacks written description and/or enablement, and is indefinite for failure to distinctly claim the subject matter which the inventor regards as the invention, and thus renders claim 1 and its asserted dependent claims invalid under 35 U.S.C. § 112. It is unclear and ambiguous, and the specification fails to disclose, what “skill level” refers to.

- The limitations “the scores of the one or more tests” and “the score of the tests” (claims 1, 18, 35, 52) are indefinite for failure to distinctly claim the subject matter which the inventor regards as the invention, and thus render claims 1, 18, 35, and 52, and their asserted dependent claims invalid under 35 U.S.C. § 112. It is unclear and ambiguous whether there is one score or a plurality of scores of the tests. This limitation is also indefinite as having an insufficient antecedent basis and thus renders claims 1, 18, 35, and 52, and their asserted dependent claims invalid under 35 U.S.C. § 112.
- The limitations “stimuli” and “stimulus” (claims 7-17, 18, 24-34, 41-51, 58-68 ) lack written description and/or enablement, and are indefinite for failure to distinctly claim the subject matter which the inventor regards as the invention, and thus renders claims 7-17, 18, 24-34, 41-51, 58-68, and their asserted dependent claims invalid under 35 U.S.C. § 112. It is unclear and ambiguous, and the specification fails to disclose, what “stimuli” and “stimulus” refer to.
- The limitation “the risk” (claim 18) is indefinite as having an insufficient antecedent basis and thus renders claim 18 and its asserted dependent claims invalid under 35 U.S.C. § 112.
- The limitation “the skills” (claim 18) is indefinite for failure to distinctly claim the subject matter which the inventor regards as the invention, and thus render claim 18 and its asserted dependent claims invalid under 35 U.S.C. § 112. It is unclear and ambiguous what “the skills” refers to.
- The limitation “language-based learning disability(ies)” (claims 2, 18, 19, 36, 52, 53) lacks written description and/or enablement, and is indefinite for failure to distinctly claim the subject matter which the inventor regards as the invention, and thus renders claim 18 and their asserted dependent claims invalid under 35 U.S.C. § 112. It is unclear and ambiguous, and the specification fails to disclose, what “language-based learning disability” refers to.
- The limitation “the user’s responses” (claim 18) is indefinite as having an insufficient antecedent basis and for failure to distinctly claim the subject matter which the inventor regards as his invention, and thus renders claim 18 and its asserted dependent claims invalid under 35 U.S.C. § 112. It is unclear and ambiguous whether the “responses” are responses to each stimulus or to each test.
- The limitation “the user” (claims 4, 6, 7, 10, 16, 17, 18, 21, 23, 24, 27, 31, 33, 34, 40, 41, 44, 50, 51, 55, 57, 58, 61, 67, 68) is indefinite as having an insufficient antecedent basis and thus renders claims 4, 6, 7, 10, 16, 17, 18, 21, 23, 24, 27, 31, 33, 34, 40, 41, 44, 50, 51, 55, 57, 58, 61, 67, 68, and their asserted dependent claims invalid under 35 U.S.C. § 112.
- The limitation “training module” (claims 1, 18, 35) lacks written description and/or enablement, and is indefinite for failure to distinctly claim the subject matter which the inventor regards as the invention, and thus renders claims 1, 18, 35, and their

asserted dependent claims invalid under 35 U.S.C. § 112. It is unclear and ambiguous, and the specification fails to disclose, what “training module” refers to.

- The limitation “as indicated by the score of the tests” (claims 1, 18, 35, 52) is indefinite for failure to distinctly claim the subject matter which the inventor regards as the invention, and thus renders claims 1, 18, 35, 52, and their asserted dependent claims invalid under 35 U.S.C. § 112. It is unclear and ambiguous what “as indicated by the score of the tests” refers to.
- The limitation “the server computer” (claim 52) is indefinite as having an insufficient antecedent basis and thus renders claim 52 and its asserted dependent claims invalid under 35 U.S.C. § 112.
- The limitation “training modes” (claim 52) lacks written description and/or enablement, and is indefinite for failure to distinctly claim the subject matter which the inventor regards as the invention, and thus renders claim 52 and its asserted dependent claims invalid under 35 U.S.C. § 112. It is unclear and ambiguous, and the specification fails to disclose, what “training mode” refers to.
- The limitation “to avoid or remediated” (claim 52) is indefinite for failure to distinctly claim the subject matter which the inventor regards as the invention, and thus renders claim 52 and its asserted dependent claims invalid under 35 U.S.C. § 112. It is unclear and ambiguous what “to avoid or remediated” refers to.
- The limitation “questions for eliciting information about risk factors” (claims 2, 19, 36, 53) is indefinite for failure to distinctly claim the subject matter which the inventor regards as the invention, and thus renders claims 2, 19, 36, 53 invalid under 35 U.S.C. § 112. It is unclear and ambiguous what “questions for eliciting information about risk factors” refers to and how/from whom the “information” is “elicited.”
- The limitation “reading-related risk factors” (claims 3, 20, 37, 54) lacks written description and/or enablement, and is indefinite for failure to distinctly claim the subject matter which the inventor regards as the invention, and thus renders claims 3, 20, 37, 54 invalid under 35 U.S.C. § 112. It is unclear and ambiguous, and the specification fails to disclose, what “reading-related risk factors” refers to.
- The limitation “the user input device” (claims 4 and 55) is indefinite as having an insufficient antecedent basis and thus renders claims 4 and 55 invalid under 35 U.S.C. § 112.
- The limitation “one or more tests comprise a rhyme recognition test ... and a fluent reader test for testing the ability to read fluently” (claims 5, 22, 39, 56) is indefinite for failure to distinctly claim the subject matter which the inventor regards as the invention, and thus renders claims 5, 22, 39, 56 invalid under 35 U.S.C. § 112. It is unclear and ambiguous whether “one or more tests” comprises one or more or all of the recited tests.

- The limitation “the speech recognition device” (claims 6, 15, 23, 32, 40, 49, 57, 66) is indefinite as having an insufficient antecedent basis and thus renders claims 6, 15, 23, 32, 40, 49, 57, 66 invalid under 35 U.S.C. § 112.
- The limitation “means for speaking the verbal response into the speech recognition device for receiving a verbal response from the user” (claims 6, 40, 57) is indefinite for failure to distinctly claim the subject matter which the inventor regards as the invention, and thus renders claims invalid under 35 U.S.C. § 112. It is unclear and ambiguous whether the recited “means” is for “speaking the verbal response” or “receiving a verbal response.”
- The limitation “user input” (claims 7, 24, 41, 58) is indefinite as having an insufficient antecedent basis and for failure to distinctly claim the subject matter which the inventor regards as the invention, and thus renders claims 7, 24, 41, 58 invalid under 35 U.S.C. § 112. It is unclear and ambiguous what “user input” refers to.
- The limitation “the test taker” (claims 8, 9, 25, 26, 42, 43, 59, 60) is indefinite as having an insufficient antecedent basis and thus renders claims 8, 9, 25, 26, 42, 43, 59, 60 invalid under 35 U.S.C. § 112.

Discovery is still in its early stages and Amplify is continuing its investigation and analysis. Amplify reserves its right to supplement and amend with further grounds of invalidity as it receives additional information either through its own investigation or from Heinemann or third parties.

**E. DOCUMENT PRODUCTION ACCOMPANYING INVALIDITY CONTENTIONS [NDCLPR 3-4]**

Amplify has produced documents it has identified based on its reasonable investigation to date. Amplify is continuing its search for responsive documents and reserves the right to supplement this production. If Amplify should subsequently identify any additional documents required under NDCLPR 3-4 it will produce such documents to Heinemann. Should they exist, Amplify reserves the right to rely on any such subsequently identified and produced documents.

Pursuant to NDCLPR 3-4, Amplify identifies the following documents from its document production:

- NDCLPR 3-4(a) Documents: AMP000713-AMP002804
- NDCLPR 3-4(b) Documents: AMP002805-AMP005142

Dated: March 5, 2014

Respectfully submitted,

FISH & RICHARDSON P.C.

By: /s/ Karolina Jesien

Karolina Jesien, Esq. (KJ 7292)  
601 Lexington Avenue  
52nd Floor  
New York, NY 10022  
Telephone: (212) 765-5070  
Facsimile: (212) 258-2291  
jesien@fr.com

Ruffin Cordell, Esq. (Of Counsel)  
Indranil Mukerji, Esq. (*Pro Hac Vice Pending*)  
1425 K Street, N.W.  
11th Floor  
Washington, DC 20005-3682  
Telephone: (202) 783-5070  
Facsimile: (202) 783-2331  
cordell@fr.com  
mukerji@fr.com

Attorneys for Plaintiff  
AMPLIFY EDUCATION, INC.

**UNITED STATES DISTRICT COURT  
SOUTHERN DISTRICT OF NEW YORK**

AMPLIFY EDUCATION, INC.,

Plaintiff/Counterclaim Defendant,

v.

GREENWOOD PUBLISHING GROUP, INC.  
d/b/a HEINEMANN,

Defendant/Counterclaim Plaintiff.

Civil Action No. 1:13-cv-02687-LTS

**CERTIFICATE OF SERVICE**

The undersigned hereby certifies that a true and correct copy of the above and foregoing document has been served on March 5, 2014, via the Court's ECF system upon all counsel designated to receive such notices.

Cosmin Maier  
Wilmer, Cutler, Hale & Dorr, L.L.P.  
7 Wold Trade Center  
New York, NY 10007  
(212) 230-8800 x8816  
Fax: (212) 230-8888  
Email: cosmin.maier@wilmerhale.com

Robert J. Gunther, Jr  
Wilmer, Cutler, Hale & Dorr, L.L.P.  
7 Wold Trade Center  
New York, NY 10007  
(212)230-8830  
Fax: (212)230-8888  
Email: robert.gunther@wilmerhale.com

/s/ Lina Tessitore  
Lina Tessitore